

Ship May 4th

Work Order ID 81300

81300

Page 1

Item ID: D350-591-312

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: ML5

Date: 12/03/13 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| Draw Nbr | Revision Nbr | | | | | | | | |
| D3272 | Rev B | | | | | | | | |

100

100

DOCUMENT CONTROL

0.00

DC

Memo

0.00

Document Control

Photocopy bluefile and type labels as per PPP D350-591-312 CHG001

8 12/04/20

12/04/25
5

110

110

Large Fab

0.00

Large Fab

Memo

0.00

Large Fab

1-Bevel end for welding FWD ONLY

2-Weld Support using Jig DT8719, weld Fwd End Plate as per QSI 004 & Dwg D3272

A/R Aluminum Rod

3-Grind End Plate flush

119785
120169

5 12/04/12

12.04.14

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 81300

March-12-12 4:43:01 PM

81300

Page 2

Item ID: D350-591-312

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 120 | QC9- Inspect visual per QSI004- Fusion Welds | 0.00 | | | | | | | |
| *120* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 130 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| *130* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 140 | Chemical Conversion Coat per QSI005 4.1 | 0.00 | | | | | | | |
| *140* | | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | | |
| Hand Finishing | | | | | | | | | |

5 0 BE12/4/15

12. 04. 14 5

~~x5~~ 12.04.16
x5 12.04.16

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 81300

March-12-12 4:43:01 PM

81300

Page 3

Item ID: D350-591-312

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

150 QC3- Inspect Part Finish

0.00

150

QC

Memo

0.00

Quality Control

x5

12.04.16

180

0.00

180

Large Fab

Large Fab

Memo

0.00

Large Fab

x5

Ae 12.04.16
12.04.17

1-Assemble Leg Assembly as per Dwg D3272.

2-Leave one rivet out until welding is complete.

3-Bevel Aft end for welding

4-Inspect for foreign object as per QSI 024

5-Weld Aft End Plate as per QSI 004 & Dwg D3272
A/RAluminum Rod 119785

6-Grind End Plate flush

7-Install last rivet as per Dwg.

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 81300

March-12-12 4:43:01 PM

81300

Page 4

Item ID: D350-591-312

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 190 | QC10- Inspect visual per QSI004- ground welds | 0.00 | | | | | | | |
| *190* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 200 | QC5- Inspect part completeness to step on W/O | 0.00 | | | | | | | |
| *200* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 210 | Chemical Conversion Coat per QSI005 4.1 | 0.00 | | | | | | | |
| *210* | | | | | | | | | |
| HandFinish | Memo | 0.00 | | | | | | | |
| Hand Finishing | | | | | | | | | |

Handwritten notes and signatures:

XS
RH
M
5/26 12.4.19

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 81300

March-12-12 4:43:01 PM

81300

Page 5

Item ID: D350-591-312 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Heli-Access-Step, Long RH
 Start Date: 12/03/2012 Start Qty: 5.00 ***5*** Cust Item ID:
 Required Date: 04/05/2012 Req'd Qty: 5.00 ***5*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|---|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|-----------------------|
| 220 *220* Powdercoat Powder Coating | White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum Memo START TIME: <u>2¹⁰</u> OVEN TEMPERATURE: <u>320 °F</u> FINISH TIME: <u>2⁴⁰</u> | 0.00 0.00 | | | | 5X | ✓ | | <i>mp</i> 12/24/12 |
| 230 *230* HandFinish Hand Finishing | Wing Walk as per dwg QSI005 4.4 Batch <u>120902</u> Memo | 0.00 0.00 | | | | 5 | ✗ | ② | 12/04/23 |
| 240 *240* QC Quality Control | QC3- Inspect Part Finish Memo | 0.00 0.00 | | | | 5 | ✗ | | 12/24/24 |

W121134

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 81300

March-12-12 4:43:01 PM

81300

Page 6

Item ID: D350-591-312

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 250 | Pick Kit | 0.00 | | | | | | | |
| *250* | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | 5 | | | 12/04/25 JB |
| Packaging | | | | | | | | | |
| 260 | QC4- 100% Inspect kits for completeness | 0.00 | | | | | | | |
| *260* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |
| 270 | | 0.00 | | | | | | | |
| *270* | | | | | | | | | |
| Packaging | Packaging | 0.00 | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | |
| Packaging | Identify and pack for shipping as per PPPD350-591-312 | | | | | | | | |
| | Location: <u>Hall</u> | | | | | | | | |

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Work Order ID 81300***81300***

Page 7

March-12-12 4:43:01 PM

Item ID: D350-591-312

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012 Start Qty: 5.00

5

Cust Item ID:

Required Date: 04/05/2012 Req'd Qty: 5.00

5

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|---|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 280 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | |
| *280* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

12/4/30
112-04-27

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-12-12 4:43:04 PM

Page 1

Work Order ID: 81300

81300

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012

Required Date: 04/05/2012

Start Qty: 5.00

Required Qty: 5.00

Comments:

IPP Rev:A04.03.22New issue KJ/RF

IPP Rev:B 07-06-09 Added D3572-1 JLM

IPP Rev:C 08-04-02 ECN1163 DD verified by:EC

IPP Rev:D 08-04-08 ECN1164 DD verified by:eC IPP Rev:D

fixe route seq in bom DD 10.04.28 verified by:EC

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|----------------|--------------|---------------|----------------|--------|
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|----------------|--------------|---------------|----------------|--------|

| | | | | | | | | | | | | | |
|-----------|--|--------------|----|--|--|-----|------|---------|----|---|--|----------|--|
| D3272-1 | | Manufactured | No | | | 110 | Each | 10.0000 | 1 | 5 | | | |
| *D3272-1* | | | | | | | | | ** | | | 12.04.03 | |
| Step | | | | | | | | | | | | | |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| ST | 381314 | |
| WA | 20 | |
| 80178 | 10 | |

(15)

| | | | | | | | | | | | | | |
|-----------|--|--------------|----|--|--|-----|------|----------|----|---|--|----------|--|
| D3067-1 | | Manufactured | No | | | 110 | Each | 178.0000 | 1 | 5 | | | |
| *D3067-1* | | | | | | | | | ** | | | 12.04.17 | |
| End Plate | | | | | | | | | | | | | |

| Location | Loc Qty | Loc Code |
|----------|---------|----------|
| WA | 152 | |
| 78608 | 92 | |
| 80881 | 60 | |
| WA016 | 26 | |
| 67582 | 2 | |
| 68214 | 1 | |
| 79607 | 23 | |

15

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-12-12 4:43:04 PM

Page 2

Work Order ID: 81300

81300

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012

Required Date: 04/05/2012

Start Qty: 5.00

Required Qty: 5.00

D3219-1

Manufactured No

110

Each

80.0000

2

10

D3219-1

Plate

**

12.04.17

Location

Loc Qty

Loc Code

WA016

382059

80

10

73410

12

77674

6

78763

62

D3066-1

Manufactured No

180

Each

66.0000

2

10

D3066-1

Spacer

**

381968 (x10) Ae 12.04.16

Location

Loc Qty

Loc Code

WA

66

78605

66

381968 (x10) Ae 12.04.16

MS20600-AD4W4

Purchased No

180

Each

2,478.000

16

80

MS20600-AD4W4

Rivets

**

M121340 (x80) Ae 12.04.16

Location

Loc Qty

Loc Code

ST321

2473

116188

59

117364

253

117601

200

117885

195

118840

1089

119860

30

119883

155

120308

72

120769

420

WA018

5

116712

5

M121340 (x80) Ae 12.04.16

March-12-12 4:43:04 PM

Shop Packet Print

Page 2

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-12-12 4:43:04 PM

Page 3

Work Order ID: 81300

81300

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012

Required Date: 04/05/2012

Start Qty: 5.00

Required Qty: 5.00

D3065-041

Manufactured No

180

Each

44.0000

1

5

D3065-041

Step Leg Assembly Hi

**

~~378798 (x5) Ac 12.04.16~~
378798 (x5) Ac 12.04.16

Location

Loc Qty

Loc Code

WA

44

66149

0

78799

40

79336

1

79419

3

D3067-1

Manufactured No

180

Each

178.0000

1

5

D3067-1

End Plate

**

12.04.17

Location

Loc Qty

Loc Code

WA

152

78608

92

80881

60

WA016

26

67582

2

68214

1

79607

23

AN3-35A

Purchased No

250

Each

147.0000

2

10

AN3-35A

Bolt

**

121068 JB 12/04/25

Location

Loc Qty

Loc Code

ST353

147

120187

47

120644

50

120717

50

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-12-12 4:43:04 PM

Page 4

Work Order ID: 81300

81300

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012

Required Date: 04/05/2012

Start Qty: 5.00

Required Qty: 5.00

D3235-1 Manufactured No

250 Each

145.0000

2

10

D3235-1

Mounting Lug

**

Location

Loc Qty

Loc Code

ST

145

78787

145

78787

D3278-041 Manufactured No

250 Each

1.0000

1

5

D3278-041

Support Assembly

**

Location

Loc Qty

Loc Code

ST481

1

78794

1

8

AN960JD416 NAS1149D0463J Purchased No

250 Each

14.0000

16

80

AN960JD416

Washer

**

Location

Loc Qty

Loc Code

ST351

14

116289

14

20

AN960JD516 NAS1149D0563J Purchased No

250 Each

0.0000

4

20

AN960JD516

Washer

**

AN5-36A Purchased No

250 Each

162.0000

2

10

AN5-36A

Bolt

**

Location

Loc Qty

Loc Code

ST340

162

120187

112

120731

50

120187

March-12-12 4:43:04 PM

Shop Packet Print

Page 4

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-12-12 4:43:04 PM

Page 5

Work Order ID: 81300

Parent Item: D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

81300

D350-591-312

Start Date: 12/03/2012

Required Date: 04/05/2012

Start Qty: 5.00

Required Qty: 5.00

D2618

Manufactured No

250 Each

304.0000 2 10 ✓

D2618

Bushing

**

JB

JB

Location

Loc Qty

Loc Code

ST012

304

76130

2

78537

102

80474

200

78537

D2230-3

Manufactured No

250 Each

187.0000 4 20 ✓

D2230-3

Lug

**

81558

JB

JB

Location

Loc Qty

Loc Code

ST480

187

53881

4

70973

1

80009

182

D2856-400

Manufactured No

250 f

202.0445 1.2 6 ✓

D2856-400

Abrasion Strip

**

JB

JB

12/04/25

Location

Loc Qty

Loc Code

ST409

202.0445

63735

0.6696

68076

0.3149

71164

8.46

79551

192.6

79551

cut (2) D2856-400-720 as per dwg

new
5/2/12/25

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-12-12 4:43:04 PM

Page 6

Work Order ID: 81300

81300

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012

Required Date: 04/05/2012

Start Qty: 5.00

Required Qty: 5.00

MS21042L3

Purchased

No

250

Each

3,226.000

2 - 10

**

121349 23

MS21042L3

Nut

Location

Loc Qty

Loc Code

ST300

3226

117441

16

117885

32

118451

5

118927

3

119017

2990

119075

180

AN4-13A

Purchased

No

250

Each

1,367.000

8

40

**

28

AN4-13A

Bolt

Location

Loc Qty

Loc Code

ST357

1367

119449

59

120187

408

120422

500

120770

400

120422

MS21042L5

Purchased

No

250

Each

1,622.000

2

10

**

12/04/25

MS21042L5

Nut

Location

Loc Qty

Loc Code

ST300

1622

116105

5

116548

43

117611

42

118179

32

119109

1500

119109

March-12-12 4:43:04 PM

Shop Packet Print

Page 6

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Picklist Print

March-12-12 4:43:04 PM

Page 7

Work Order ID: 81300

81300

Parent Item: D350-591-312

D350-591-312

Parent Item Name: Heli-Access-Step, Long RH

Start Date: 12/03/2012

Required Date: 04/05/2012

Start Qty: 5.00

Required Qty: 5.00

MS21042L4

Purchased

No

250

Each

3,831.000

8

40

**

MS21042L4

Nut

Location

Loc Qty

Loc Code

ST300

3831

117441

51

117601

157

118451

133

119017

200

119075

3290

AN960JD10

NAS1149D0363J

Purchased

No

250

Each

0.0000

4

20

**

AN960JD10

Washer

119075

121243 JB 12/04/24

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



| | | | |
|----------------------|----------------------|--|------------------------|
| DESIGN <i>GP</i> | DRAWN BY <i>B</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>LE</i> | APPROVED <i>H</i> | DRAWING NO. D3272 | REV. E SHEET 1 OF 1 |
| DATE 07.05.18 | | TITLE STEP ASSEMBLY, HI LONG SCALE NTS | |
| A | 04.03.01 | NEW ISSUE | |
| B | 07.05.18 | D3272-1 WAS D2622-120 | |

RELEASED

07.06.04 *H*



| QTY -041 | QTY -042 | PART NUMBER | DESCRIPTION |
|-------------|-------------|--------------|-------------------------------|
| X | | D3272-041 | STEP ASSEMBLY, HIGH LONG (LH) |
| | X | D3272-042 | STEP ASSEMBLY, HIGH LONG (RH) |
| | | | |
| 1 | 1 | D3065-041 | LEG ASSEMBLY |
| 2 | 2 | D3066-1 | SPACER |
| 2 | 2 | D3067-1 | END PLATE |
| 2 | 2 | D3219-1 | SUPPORT |
| 1 | 1 | D3272-1 | STEP |
| | | | |
| 16 | 16 | MS20600AD4W4 | RIVET |
| | | | |

GENERAL NOTES:

- 1) D3272-041 SHOWN. FOR D3272-042, INSTALL D3219-1 SUPPORT OPPOSITE SIDE
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005.4.1
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.
- 6) BREAK ALL SHARP EDGES 0.005 TO 0.010 MAX.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 87300 *MLJ*
12/03/13

Copyright © 2004 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries



| | | | |
|------------------------|---------------------------------|---|--------------|
| DESIGN 90 | DRAWN BY [Signature] | DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA | REV. E |
| CHECKED [Signature] | APPROVED [Signature] | DRAWING NO. D3272 | SHEET 2 OF 2 |
| DATE 07.05.18 | TITLE STEP ASSEMBLY, HI LONG | SCALE 1:20 | |

DETAIL A



81300

116.25
(CUT LENGTH OF D3272-1, REF)

108.93
(DIST FROM FIRST HOLE TO FWD FACE OF SUPPORT)

DETAIL B

1 D3219-1
SUPPORT
(2 PLACES)

D3272-1 STEP



D3272-041 STEP ASSEMBLY (LH. SHOWN)
D3272-042 STEP ASSEMBLY (RH, OPPOSITE)

APPLY BLACK ANTI-SKID
ON TOP SURFACE TO
BOTTOM OF TOP RADIUS

RIVET D3065-041
TO D3272-1 USING
MS20600AD4W4 RIVET
(16 PLACES)

1.36
(REF)

0.65
(REF)

GRIND FLUSH
(TYP)

(TYP)

3.375

D3219-1
SUPPORT
(REF)

D3067-1 END PLATE
(2 PLACES)

D3066-1 SPACER
(2 PLACES)

D3065-041
LEG ASSEMBLY

DETAIL A
(SCALE 1:5)

DETAIL B
(SCALE 1:5)

RELEASED
07.06.04

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

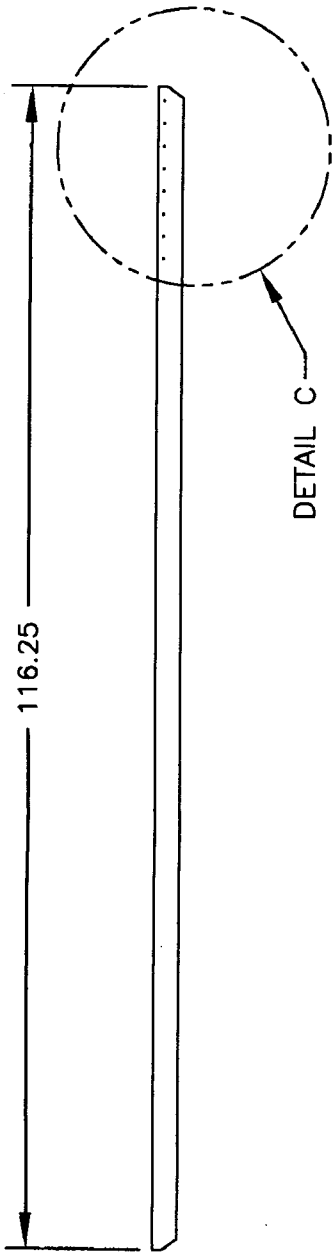


| | | | |
|----------------------|--------------------------------|---|---------------|
| DESIGN <i>GP</i> | DRAWN BY <i>[Signature]</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>LE</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D3272 | REV. B |
| DATE 07.05.18 | | TITLE STEP ASSEMBLY, HI LONG | SCALE 1:20 |
| | | SHEET 3 OF 3 | |

9/300

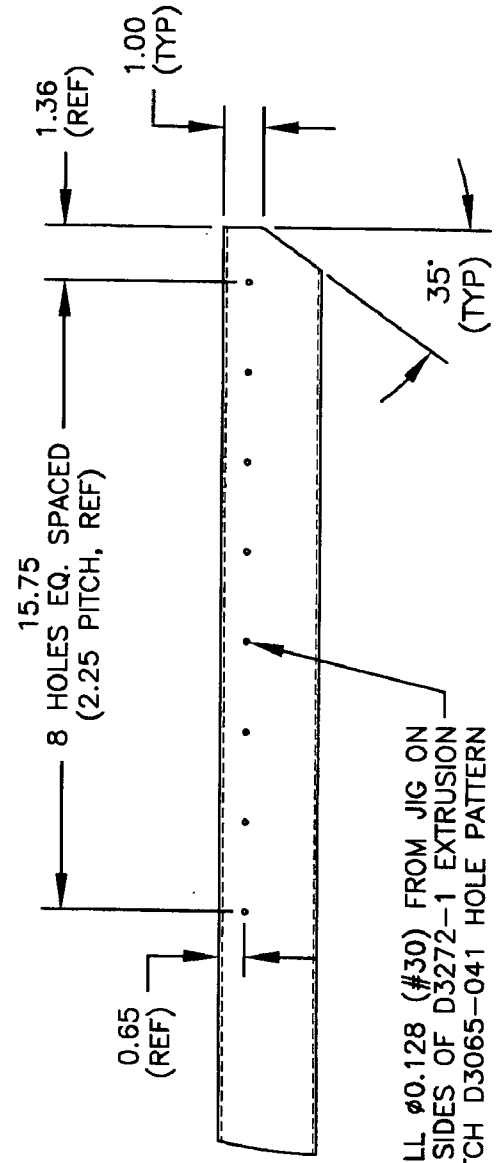
RELEASED

07.06.04 *[Signature]*



DETAIL C

B D3272-1 STEP
(MAKE FROM D2622-120 STEP EXTRUSION)



DRILL $\phi 0.128$ (#30) FROM JIG ON BOTH SIDES OF D3272-1 EXTRUSION TO MATCH D3065-041 HOLE PATTERN

DETAIL C
(SCALE 1:5)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

| Qty -211 | Qty -212 | Qty -213 | Qty -214 | Qty -215 | Qty -216 | Qty -311 | Qty -312 | Part Number | Description |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|---|
| X | | | | | | | | D350-591-211 | <i>Heli-Access-Step</i> ™, Long Step – High Skid, LH |
| | X | | | | | | | D350-591-212 | <i>Heli-Access-Step</i> ™, Long Step – High Skid, RH |
| | | X | | | | | | D350-591-213 | <i>Heli-Access-Step</i> ™, Short Step – High Skid, LH |
| | | | X | | | | | D350-591-214 | <i>Heli-Access-Step</i> ™, Short Step – High Skid, RH |
| | | | | X | | | | D350-591-215 | <i>Heli-Access-Step</i> ™, Short Step – Low Skid, LH |
| | | | | | X | | | D350-591-216 | <i>Heli-Access-Step</i> ™, Short Step – Low Skid, RH |
| | | | | | | X | | D350-591-311 | <i>Heli-Access-Step</i> ™, Long Step – High Skid, LH |
| | | | | | | | X | D350-591-312 | <i>Heli-Access-Step</i> ™, Long Step – High Skid, RH |
| 1 | | | | | | | | D3070-041 | STEP ASSEMBLY (HIGH-LONG, LH) |
| | 1 | | | | | | | D3070-042 | STEP ASSEMBLY (HIGH-LONG, RH) |
| | | 1 | | | | | | D3078-041 | STEP ASSEMBLY (HIGH-SHORT, LH) |
| | | | 1 | | | | | D3078-042 | STEP ASSEMBLY (HIGH-SHORT, RH) |
| | | | | 1 | | | | D3168-041 | STEP ASSEMBLY (LOW-SHORT, LH) |
| | | | | | 1 | | | D3168-042 | STEP ASSEMBLY (LOW-SHORT, RH) |
| | | | | | | 1 | | D3272-041 | STEP ASSEMBLY (HIGH-LONG, LH) |
| | | | | | | | 1 | D3272-042 | STEP ASSEMBLY (HIGH-LONG, RH) |
| 4 | 4 | | | | | | | D2182B035 | RUBBER CUSHION |
| | | 2 | 2 | 2 | 2 | | | D2230-1 | MOUNTING LUG |
| | | 2 | 2 | 2 | 2 | 4 | 4 | D2230-3 | MOUNTING LUG |
| 8 | 8 | | | | | | | D2274 | RADIUS BLOCK |
| | | | | | | 2 | 2 | D2618 | BUSHING |
| 4 | 4 | 4 | 4 | 4 | 4 | | | D2732-030 | CUSHION |
| 2 | 2 | 1 | 1 | 1 | 1 | 2 | 2 | D2856-400-720 | ABRASION STRIP |
| 2 | 2 | | | | | | | D3064-1 | CLAMP |
| 1 | 1 | | | | | | | D3079-041 | SUPPORT ASSEMBLY |
| 4 | 4 | | | | | | | D3080-1 | CLAMP |
| | | | | | | 2 | 2 | D3235-1 | MOUNTING LUG |
| | | | | | | 1 | 1 | D3278-041 | SUPPORT ASSEMBLY |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | AN3-35A | BOLT |
| 10 | 10 | 2 | 2 | 2 | 2 | | | AN4-11A | BOLT |
| | | 4 | 4 | 4 | 4 | 8 | 8 | AN4-13A | BOLT |
| | | | | | | 2 | 2 | AN5-36A | BOLT |
| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | AN960JD10 | WASHER |
| 20 | 20 | 12 | 12 | 12 | 12 | 16 | 16 | AN960JD416 | WASHER |
| | | | | | | 4 | 4 | AN960JD516 | WASHER |
| 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | MS21042L3 | NUT |
| 10 | 10 | 6 | 6 | 6 | 6 | 8 | 8 | MS21042L4 | NUT |
| | | | | | | 2 | 2 | MS21042L5 | NUT |
| | | | | | | 1 | 1 | *DSI 9410-011 | STEP MODIFICATION KIT |

*DSI 9410-011 Step Modification Kits are provided with all D350-591-311 and D350-591-312 Steps. This kit is provided as an option for the installer and is therefore **NOT REQUIRED** to complete the installation of the D350-591-311 or D350-591-312 Steps. Refer to Figure 21 for installation of the DSI 9410-011 Kit.